HEALTH SERVICES UTILIZATION AND RESEARCH COMMISSION

Annual Report
2000-01

102-01421/

The Honourable John T. Nilson, Q.C.
Minister of Health
Legislative Assembly
Regina SK S4S 0B3

Dear Mr. Nilson:

I am pleased to submit, for your consideration, the annual report of the Health Services Utilization and Research Commission for the fiscal period April 1, 2000 - March 31, 2001.

Respectfully submitted,

E.L. Harrison, PhD, MSc, BPT
Chair

Health Services Utilization and Research Commission

The mission of the Health Services Utilization and Research Commission is to promote the wellness of the people of Saskatchewan by fostering the efficient and effective utilization of health services and by stimulating, funding, and promoting research in the healing arts and health sciences.

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Statement from the Chair

During 2000-01 HSURC focused on improving support for health research in Saskatchewan, looking to the future in the delivery of health care, and organizing board structures to ensure the Commission continues to be strategically focused, outward-looking, responsive, and flexible.

The world of health research changed dramatically this year, with the federal government's launch of the Canadian Institutes of Health Research (CIHR). CIHR represents an important new national investment in bringing Canadian health research into the twenty-first century, with more funding and an increased focus on strategic research initiatives.

The bad news is that Saskatchewan health research is on life support. In the first national competition for CIHR, announced in February, Saskatchewan researchers came home with just one half of one per cent of the national funding available – far less than the three per cent we would be entitled to if this money were distributed based on population. Locally, Saskatchewan invests only $5-million of a $2-billion provincial health budget in improving health care through research. With its limited share of this funding – about $1.2-million – HSURC cannot support research scholars or students, the foundation of a successful research program. Saskatchewan's university-based research facilities are also cramped, inadequate, and out-of-date.

HSURC continued to advocate for increased provincial support for health research and to encourage researchers to form partnerships to respond to the new national programs in health research. One major initiative of HSURC was to fund, under an agreement with the University of Saskatchewan, a university coordinator of health research. Dr. Bruce Waygood took up this position in July of 2000, and immediately set to work in the province identifying barriers to increased research success and strategies to overcome them.

The world of health services delivery is also evolving rapidly. Last year, after extensive consultation, HSURC identified four major research themes for its in-house health services utilization research: improving health system effectiveness; improving clinical effectiveness; helping improve health resources morale and organization; and, supporting development of long-term health policy. This year we released a series of reports under these themes which addressed issues related to health service delivery and made recommendations for improving the effectiveness of health services:

- Performance indicators for improving health system effectiveness;
- Barriers to more use of community mental health services;
- The effect of population trends on future demand for health services;
- The cost-effectiveness of preventive home care; and
- Updates of our previously issued clinical practice guidelines.

We also helped organize a conference on care pathways; continued to develop research to help improve recruitment, retention, and morale of health workers; and, participated in activities and research aimed at improving drug prescribing.

Internally, our board adopted a new model of policy governance. Through a series of board workshops, the board reviewed its existing practices and objectives and established a comprehensive, clear set of ends or goals for programs, and policies to govern their administration.

The board defined HSURC's vision as "Optimal health for the people of Saskatchewan," and our mission as "Increased knowledge, contributing to health, in Saskatchewan." To achieve this mission, the board identified three major ends or goals:

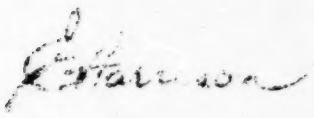
- Nurturing a climate conducive to attracting and retaining quality health researchers and providers;
- Producing research that contributes to a new understanding of health; and,
- Ensuring decision makers apply new and existing health and health services research.

HSURC also launched a new, more user-friendly web site during the year to support our rapidly growing electronic interaction with health researchers and providers. For an overview of HSURC's programs, research, and activities, we invite you to visit www.hsurc.sk.ca.

As the year ended, the Fyke Commission on Medicare promised new changes for the year ahead. Commissioner Ken Fyke publicly voiced support for an expansion of health research, and called for a Quality Council, incorporating HSURC's health services utilization work, to lead the push for an improved health delivery system.

Change is never easy. Established ways of doing things—whether in health research or health service delivery—are often difficult to change. The pay-offs, however, are great. The test should always be whether change would improve

the effectiveness of health care in Saskatchewan. HSURC stands ready to help with the changes required to help provide optimal health for the people of Saskatchewan.



E.L. Harrison, PhD, MSc, BPT
Chair, HSURC

General Information

Legislative authority and mandate

The Health Services Utilization and Research Commission is an arm's-length, government-funded agency with a dual mandate: to assess Saskatchewan's health system and recommend evidence-based changes, and function as the provincial health research granting agency. It was established by the province through an order-in-council in February 1992. HSURC now has its own provincial legislation, *The Health Services Utilization and Research Commission Act*, which received royal assent from Saskatchewan's lieutenant-governor on June 2, 1994.

Our legislation empowers us to do utilization research in addition to carrying on the granting agency mandate inherited from the Saskatchewan Health Research Board. Specifically, we are directed to:

- study the factors affecting the health of individuals or groups;
- study the factors affecting the use of health services and health services resources;
- study the effectiveness of health procedures, practices, and technologies;
- identify practical means to better utilize health services and health services resources;
- report to the Minister results of our studies and research, and make recommendations to the Minister based on studies and research;
- study matters respecting health services referred to us by the Minister;
- inform Saskatchewan residents and providers of health services of our study findings, or research funded by the Commission;
- provide reports, research, and consulting services to any person, agency, or body; and,
- fund and otherwise stimulate in Saskatchewan, studies of and research in the basic and clinical health sciences and the health-related social sciences pertaining to human health status.

Structure

Under the HSURC Act, the chair and vice-chair are designated by the lieutenant-governor.

Commission members may hold office for up to three years per term. They are eligible to be reappointed but for not more than two consecutive terms.

At least two commissioners must be faculty of the University of Saskatchewan, and at least one must be faculty of the University of Regina.

Appendix 1 lists the board members who served during 2000-2001.

Staff

As of March 31, 2001, the HSURC core staff comprised:

Laurence Thompson, Chief Executive Officer
Maureen Bingham, Research Transfer Officer
June Bold, Director of Grants and Awards
Bonnie Brossart, Senior Research Officer
Kelly Chessie, Research Officer
Dianne Ferguson, Research Transfer Officer
Laurie Gander, Research Officer
Joanne Hader, Senior Research Officer
Heather MacDonald, Research Officer
Maria Mathews, Research Officer
Barb Nisbet, Office Manager
Sherry Wailing, Accountant
Val Ziegler, Administrative Support

Utilization Research

How we conduct research

For each study, the Commission establishes a working group of stakeholders that is chaired by a board member. Our goal is to assemble multi-disciplinary, representative panels to guide projects. Group composition is determined largely by the study topic. Specialists, general practitioners, nurses, administrators, and representatives of other health occupations and the public have participated on our working groups.

For most studies, the working group chair and HSURC staff draft terms of reference. This information is presented to the group for review and revision at its first meeting, along with a review of the health sciences literature and any data that have been collected.

Working group members generate study questions and hypotheses, advise the Commission on data collection and analysis, guide the work of research staff, review drafts, and develop recommendations. Appendix 2 lists working group members for HSURC studies.

Completed projects in 2000-2001

Health human resources

In September 2000 Saskatchewan Health released a report by Allen Backman on recruitment and retention of health professionals in Saskatchewan (*Job Satisfaction, Retention, Recruitment, and Skill Mix for a Sustainable Health Care System*). HSURC staff contributed to the project by conducting focus groups with providers around the province.

We are involved in some activities and initiatives stimulated by the report, including the new Health Human Resources Council and a study of "magnet" working environments that attract and retain high-calibre nurses even in times of nursing shortages.

Preventive home care

In May 2000 we completed our second of three studies on home care, this one looking at the impact of preventive home care and seniors housing on health outcomes. Using provincial databases, we studied the extent to which these two support services help seniors live longer, live independently longer, and incur

lower health costs than seniors not using these services.

After adjusting for health status and use of other health services, we found Saskatchewan seniors receiving preventive home care were more likely to lose their independence or die than those not receiving this service, while residents of seniors housing were less likely to die or lose their independence. Although more research is needed to fully evaluate these services, our findings suggest seniors housing is more effective than preventive home care in keeping seniors alive and out of nursing homes, and results in lower overall health service costs. This study was supported in part by a grant from Health Canada's Health Transition Fund.

System performance indicators

Decision makers and researchers around the world—including those in Saskatchewan—are hard at work developing ways to measure health system performance. After several years of thinking and reading, HSURC released a discussion document in September 2000 entitled *System Performance Indicators: Toward a Goal-Based Health System*. In this think-piece we review current work on system performance models and indicators from elsewhere in the world. Besides proposing a framework that encourages decision makers to focus on system goals and adopt best practices to achieve them, we also recommend that measures of health system performance be ranked in order of importance and be concise.

We are now involved on several committees related to Saskatchewan Health's provincial indicator project, and exploring different areas of research we hope will contribute to the development of specific performance indicators (e.g., acceptability, or system responsiveness). Our goal for any research we conduct in this area is to play a part in developing a set of goal-based, outcome-focused system-wide indicators that lead to more effective decision-making.

Mental health

In October 2000, we released the findings of our pilot study on mental health clients' use of inpatient and subsequent community-based care in three health districts: Prince Albert, Saskatoon, and East Central (*Psychiatric Hospitalizations and Subsequent Use of Community Services: A Pilot Study*). Consistent with the literature, we found that many mental health patients can be effectively treated with short hospital stays. We also showed, however, that Saskatchewan patients may be staying in hospital longer than required. Our preliminary data suggest that increased observation and sub-acute care, as well as better integration and availability of community care, might reduce non-acute use of inpatient care. Based on

these findings, we recommended that health districts review their use of inpatient and subsequent community-based care for this patient population.

Using this project as a catalyst for discussion, we asked stakeholders to identify priority research questions around delivery of mental health services. A working group was formed in November 2000 to oversee our next research study.

Population, health services projections

Is Saskatchewan's population growing? Will we have more seniors in the future? What impact will the changing population have on our health care system? Using historical population data for each health district and for Saskatchewan as a whole, we projected the population to 2015, described the expected change in the size and composition of the seniors population, and identified implications of the changing population for the health care system.

We found that Saskatchewan's population will grow by about one per cent over the next 15 years, with health districts in northern and central areas likely to increase and those in the southern parts of the province expected to decrease. The seniors (65+) population will grow by six per cent, with numbers of seniors rising in the north and large urban health districts but falling in southern districts.

These projections suggest that although the number of key health services (acute care beds, long-term care beds, and home care clients) will stay relatively stable provincially, there will be substantial shifting of resources within individual health districts. The numbers of acute and long-term care beds and home care clients will generally rise in the northern health districts and fall in the southern health districts.

HSURC board members served as the working group for this project.

Optimal prescribing (The ABX Project)

With the support of a grant from Health Canada's Health Transition Fund (HTF), a research team involving representatives of HSURC, Saskatchewan Health, the Saskatchewan Pharmaceutical Association, University of Saskatchewan, and Saskatoon District Health, studied the impact of several physician and patient interventions on prescribing of and adherence to antibiotics. Over the past year, the ABX project team collected and analyzed data in four small urban centres in Saskatchewan. The group plans to release our findings in May 2001.

Current projects

Emergency services

The topic of emergency medical services moved up on HSURC's research agenda in the past year, based on the strong interest expressed by stakeholders contacted through our environmental scanning and results of a survey we conducted as part of our study on the closure of small rural hospitals.

In light of this increased appetite for research on rural emergency services, we have increased the size of our working group. HSURC staff is now mapping a research plan for the top priority identified by the group when it met in the fall: Evaluating the province's First Responders program. The aim of this project will likely be to describe the program's current status: Which communities have first responders? What do they do? How are they funded? How do they acquire and maintain their skills? Why are some districts' programs successful and others not?

Clinical practice guidelines - evaluation

In 1998 HSURC received funding from the Medical Research Council to study the impact of its eight clinical practice guidelines. As part of this project, we have collected data through in-person interviews with and a mail-in survey of Saskatchewan physicians, and reviewed administrative data from Saskatchewan Health and hospitals and labs across the province. During the past year, the final of this three-year project, we focused on pulling together the various data for analysis and drafting for peer review a paper on the physician interview component of our study.

Clinical practice guidelines - recertification

To ensure that all of our practice guidelines reflect the latest medical evidence, we systematically review them at least every three years—or sooner if new, relevant evidence arises. We recertified six guidelines during the past year:

- Use of routine electrocardiograms;
- Routine prenatal ultrasound;
- Selective prenatal ultrasound;
- The PSA test in early detection of prostate cancer;
- Thyroid function testing; and,
- Selective chest radiography .

We should finish reviewing our CPG on cholesterol testing and treatment by late fall 2001. The review of our guideline on cervical cancer screening guidelines was put on hold pending the results of a proposed provincial initiative in this area.

Hip fracture

Although hip fractures can occur at any age, they are most common in seniors and result in an increased

risk of mortality and functional dependence. They are a leading cause of loss of independence. Hip fractures also place a considerable strain on the health care system in terms of the costs associated with prevention, treatment, and management.

In July 2000 we convened a working group that will oversee research on ways to reduce the burden of illness and cost resulting from hip fractures in older Saskatchewan residents. The group has decided to focus on two main areas: bone mineral density (BMD) testing, and the characteristics and health outcomes of Saskatchewan seniors who sustain hip fractures. We will try to identify the best evidence-based applications of BMD testing, how BMD testing is used in Saskatchewan, and gaps between the two. The study panel will also determine whether there are urban-rural variations in the characteristics and health outcomes of hip fracture patients.

Preventive home care follow-up

After we released our study on preventive home care and seniors housing, stakeholders in Saskatchewan health districts told us they needed more information about outcomes such as quality of life, social isolation, and use of informal caregiver support before they could make decisions about their own programs. We will use surveys to compare these outcomes in seniors receiving preventive (light levels) home care and those living in seniors housing. We will also conduct focus groups with informal (i.e., unpaid) caregivers to identify any issues in this group.

The working group has finalized its research questions and approved a study design. Data collection is expected to begin in fall 2001.

Knowledge Transfer Unit

During the past year, HSURC's research transfer staff continued to develop and build this side of our operations. We rolled our communications functions into the Research Transfer Unit, and renamed the combined division our Knowledge Transfer Unit. It is primarily responsible for ensuring new and existing health knowledge gets applied in the health system.

Sustained interactivity with decision-makers

We continue to modify and expand our environmental scanning process and incorporate its results into our decision-making. All staff members help monitor the health care environment, both provincially and nationally.

Building relationships throughout the health care system is a cornerstone of the new Knowledge Transfer Unit. Our research transfer officers continue to look for ways to

expand existing networks, to increase the exchange of information between researchers and decision makers.

Decision makers aware of relevant research

Since our new web site went live in January, it has been attracting an average of 230 visitors per day. Our daily news digest also continues to be a very popular service. More than 1,100 people receive this comprehensive electronic news clipping service, which provides links to health and research information in Canada's daily newspapers, major international medical journals, and new study publications.

Decision makers understand relevant research

A communications evaluation we conducted following the release of our preventive home care study showed that a high percentage of our stakeholders were aware of the study and that 70 per cent of respondents who had read all or part of the report found it easy to understand. These results are encouraging, as they confirm our summary reports are reaching and being read by an ever-wider audience. That said, we continue to focus on communicating our research to decision makers and providers in a manner that is easily understood.

Our preventive home care study marked the first time that research transfer staff visited health districts throughout the province to explain the findings of an HSURC project. Feedback from these informal presentations suggests that stakeholders appreciate the opportunity to gain a better understand of the study by asking questions and discussing the implications of the study for their area of practice and health district.

Capacity developed to select and apply evidence

During the past year, programming for meetings of the District Utilization Coordinators Group (DUCG) focused on long-term care, evidence-based decision-making, and care pathways. These sessions provided an opportunity to build research capacity in health districts.

Through the research column in our quarterly newsletter (which also appears in the Tools section of our web site), we offered readers tutorials in survey design and evidence-based decision making.

Opportunities to apply evidence available at system level

Our staff has been working with representatives of other provincial health organizations and associations to promote the development and use of integrated care pathways. A workshop in November attracted over 200

participants and gave rise to a proposal for a provincial integrated care pathways program.

Regionalization Research Centre establishes membership and governing board

This was the fifth year of HSURC's participation in the national Networks of Centres of Excellence (NCE) research program called HEALNet (Health Evidence and Application Linkage Network). The NCE program is a partnership of Canadian universities, Industry Canada, and the federal research granting councils. HEALNet has received core funding from the Canadian Institutes of Health Research and the Social Sciences and Humanities Research Council. In 1995, HEALNet initially received a 3.5-year grant to embark on a project to identify methods and instruments to assist evidence-based decision making in health. Based at McMaster University, the project has components across Canada. In 1998, HEALNet developed a renewed strategic plan and its membership in the NCE program was extended, with funding confirmed to 2002.

The Regionalization Research Centre was established as part of the HEALNet program. It is a national organization of decision makers and researchers. Goals of the Centre are to promote the study of regionalization as an innovation and provide an avenue for Canadian regional health authorities (RHAs) to meet their research needs in relevant and helpful ways.

The Centre held its founding meeting in January 2001 in Saskatoon, at which time it established a governing board. The board includes researchers from universities and the Canadian Institute for Health Information (CIHI), and decision makers from regional health authorities in different parts of Canada. Board chair is Armand Boudreau, CEO of the Régie Régionale de la santé et des services sociaux d'Outaouais. Members are Steven Lewis, an independent consultant who is also with the University of Calgary; Jennifer Zelmer, of CIHI; Robert Bear, with Capital Health Authority in Alberta; Julia Abelson, of CHEPA at McMaster University; Pierre-Gerlier Forest, from Laval University; Ann Casebeer, with the University of Calgary; Ray Scott, CEO of the Inuvik Regional Health and Social Services Board; Dora Nicinski, CEO of North Okanagan Health Region in BC; Raymond Ewanchuk, of the Parkland District Health Board in Saskatchewan; and, Maura Davies, with Capital District Health Authority in Nova Scotia. Denise Kouri is the director of the Centre. The Centre also has a researcher, Lynda Lee, and office manager, Barbara Crockford.

The Centre is a creative and unconventional enterprise, focusing on regionalization—an area that, although under-researched, is very important to health care policy in Canada. Its strategy of bridging the world of decision makers with that of researchers is intended to build capacity in both worlds, and to develop research that is more relevant to and likely to be put into action by RHAs.

In 2000-2001, the newly established Centre focused on developing its program and membership. It recruited RHAs and other institutions and individuals from across Canada. The Centre has more than 60 institutional members, most of which are regional health authorities but also include several provincial/territorial health ministries. Membership also includes 15 researchers, plus other interested individuals.

The Centre's network was invited by the Quebec *Conférence des régies régionales de la santé et des services sociaux* to help stage a videoconference on regionalization experiences, with RHA participants from six provinces. The exchange was used by the *Conférence* in developing its response to Quebec's Clair Commission.

The Centre developed its resource centre throughout the year. Much of the currently available information about regionalization is not yet in published form. Centre staff compiled government documents and information and collected published materials. All information is posted on the Centre's web site, to make it as accessible as possible. The web site was developed with the assistance of a grant from the Canadian Health Services Research Foundation (CHSRF). As well as providing research and reference resources on regionalization, the web site also holds parts of the Centre's RHA database and other educational materials.

Centre staff made several presentations about regionalization, to the Clair Commission, in Quebec City; the Ontario District Health Councils, in Mississauga; and to HEALNet researcher workshops. The Centre set up information tables at conferences staged by HEALNet and the Saskatchewan Association of Health Organizations, and regularly responded to ad hoc requests for information.

In 2000-01 the Centre joined a five-province study examining different methods health authorities can use to involve the public. The project, which is being led by researchers at McMaster and Laval Universities, is funded by CHSRF. The Centre also continued to work with researchers in Saskatoon and at McMaster University in examining the effect of "framing" (how a problem is posed) on resource allocation decisions in RHAs.

During the past year, the Centre published the curriculum for workshops it previously pilot tested, in a document entitled *Strategies for Informed Democratic Decision Making: A Course for Regional Health Authorities.* The Centre also published a paper (*Exploring Health Care Regionalization and Community Capacity)* on a case study it carried out in 1998-99.

Research Funding

Overview

The Commission's research-funding mandate encompasses two broad areas of activity. One is offering financial support for health research done in universities and other agencies in Saskatchewan. We do this mainly through our annual research funding competitions. The other is stimulating and promoting health research within the province, which we pursue through various initiatives, often in partnership with other key players in the health and university environments. Our current partnership initiatives are described later in this section.

This year, HSURC committed $1.4-million to its grants and awards program (see Table 1), $100,000 to a partnership supporting a university health research co-ordinator, $100,000 to the Saskatchewan-Canadian Institutes of Health Research Regional Partnership Program (Sask-CIHR RPP), and $275,000 to a fund for the Saskatchewan Population Health and Evaluation Research Unit (SPHERU). In addition, we continued to manage $900,000 in other provincial funds, including another $250,000 for SPHERU (from Saskatchewan Health) and $650,000 for the Sask-CIHR RPP (from Saskatchewan Health and Saskatchewan Economic and Co-operative Development). Administrative costs for all these initiatives were about $120,000.

Competition categories

To achieve maximum benefit from our limited resources, we target our financial support in select areas. HSURC offers individual research grants to help new health researchers establish their careers and to encourage growth in social science health research. We also support advanced research training through our personnel awards. The Commission holds regular annual competitions in these three priority areas, enlisting the advice of research experts to evaluate all applications (our review process is described below). In addition, we offer occasional matching funding support for conferences or meetings that help build or enhance health research in Saskatchewan.

The *HSURC Awards Guide*, published annually in December, describes fully all competition categories and related policies, including eligibility criteria and submission requirements. Each year we also publish the *HSURC Awards Prospectus*, a brochure that provides a brief overview of our programs. HSURC's web site carries all competition materials and informs

our audiences about changes and new initiatives.

During the 2000-01 fiscal year, we invited applications in the following categories:

Biomedical Establishment Grants are intended to help new biomedical researchers establish their research careers in Saskatchewan. Successful applicants receive up to $35,000 per year for a maximum of two years.

Socio-Health Research Grants (Establishment and Operating) are available to researchers in Saskatchewan doing social science research related to health. The grants provide a maximum of $35,000 per year for up to two years.

Socio-Health Research Development Grants help researchers develop study elements essential to the preparation of a subsequent, full-scale health research project. New researchers and those establishing a new research focus are eligible. The one-year awards offer a maximum of $5,000.

Research Fellowships:

Postdoctoral Fellowships are available to individuals with a doctorate degree who want to develop their research skills through a period of independent, full-time investigation, and to equip themselves for a career in health research. The stipend increased this year to $35,000 per year for up to two years, and a new research allowance provides $1,750 per year.

Clinical Research Fellowships are intended for individuals with professional degrees in a human health area who wish to pursue a career as a clinician researcher in Saskatchewan. Award holders may undertake graduate research training during the fellowship. The stipend changed this year, to a base level of $35,000 per year for up to two years and a second level for more experienced individuals of $45,000 per year for up to two years. Both levels provide a research allowance of $1,750 per year.

Establishment Equipment Grants allow new researchers to acquire major equipment essential to establishing their research programs. Only Establishment Grant applicants are eligible to apply for these awards, which offer a one-time maximum of $30,000.

Conference Grants of up to $5,000 are available to support conferences and meetings related to the development of health research in Saskatchewan. Eligible conferences cannot be part of a regularly held series.

Review process

All eligible grant and award applications are reviewed by committees of experts from related

health disciplines. Review committee chairs and members are drawn from the Saskatchewan research and health care community. The chairs are in some cases members of HSURC's board. The Commission is extremely grateful to its review committee members, who generously provide their expertise on a volunteer basis for three-year terms. Without them we could not operate our adjudication processes, which are the foundation of our granting program. During 2000-01, we had three review committees: the Biomedical, Socio-Health, and Personnel Awards Review Committees. Committee members are listed in Appendix 3.

While applications for personnel awards and socio-health development grants are assessed solely by HSURC review committees, all research grant applications are also reviewed by two out-of-province experts. These external reviews form an essential part of our review committees' deliberations. Review criteria include scientific merit, importance to the field of study, feasibility, and relevance to health. Committee members adjudicate and rank applications and, based on those results, recommend worthy applications to the Commission. Final award decisions depend on HSURC's available resources.

Ensuring accountability

We have established a number of mechanisms to ensure the public receives the best possible value for its investment in health research. The Commission assesses all grant applications on the basis of rigorous peer review, strict rules and eligibility criteria, and ethical guidelines. All successful applicants must submit interim and final reports, and HSURC tracks grant recipients' subsequent research successes (e.g., publications and further grant funding). We review our grant programs periodically to ensure they continue to meet our goals for health research development in Saskatchewan. We also monitor research trends and the activities of other provincial and national research funding agencies.

Profile of the twenty-first competition (2000-01)

The Commission approved grants totaling $1.4-million this year. Table 1 summarizes the 2000-01 competition, showing the number of applications received, the number recommended for funding by the peer-review committees, and the number actually approved. Appendix 4 lists all successful applicants and their research topics.

Demand for biomedical establishment grants remained relatively steady at 13 applications. We approved seven of these—five of which included equipment grants—for a total of $590,086. This investment was about the same as

last year's and went to support faculty beginning their research careers and studying a wide variety of topics, including drug reactions, hypertension, genetics, infant stroke, anti-fungal therapy, and intestinal immunity.

There were 17 applications in the socio-health area, which was up from last year and slightly higher than our five-year average. We approved four applications, as recommended by the review committee, for a total of $154,893. These included two establishment grants, one research development grant, and one operating grant. Topics under study are the impact of concussion on athletes, perceived well-being among disabled individuals, factors in maintaining physical activity, and home-care patterns in Canada. The approved amount, which is lower than last year's and below our five-year average, continues a troublesome declining pattern that began four years ago. Although strengthening socio-health research has been a priority for HSURC since the mid-1980s, we have not seen the growth we had hoped to.

The research fellowship competition continued to be strong, with 26 applications. This number is slightly higher than last year and above our five-year average of 24. We awarded 10 postdoctoral research fellowships, including eight new two-year awards and two one-year renewals. The total investment of $661,500 is 20 per cent higher than our five-year average, due to a larger pool of available funds, high-calibre candidates, and an increase in stipend rates.

Partnership initiatives

Regional Partnership Program

This was the second year for the Saskatchewan-Canadian Institutes of Health Research Regional Partnership Program (Sask-CIHR RPP). Started in May 1999, the five-year program aims to reverse the declining flow of federal health research funds to the province over the past decade. The Saskatchewan government and the CIHR are each committed to investing $5-million toward this $10-million program. Provincial matching funds are provided by HSURC, Saskatchewan Health, and Saskatchewan Economic and Co-operative Development. HSURC manages and disburses the provincial funds, as directed by a local advisory committee comprising representatives of the funding partners and the province's two universities.

Applications that meet standards of scientific merit but are not supported by CIHR's regular funding pool are eligible for RPP support. Saskatchewan's advisory committee decides which of these applications meet local criteria intended to ensure the program plays a developmental role in increasing health research capacity in the province.

The committee established its decision guidelines early in the program and distributed them widely within the health research community. Funding criteria give priority to faculty salary awards, which help retain professionals and ensure a foundation on which to build research capacity. A second priority is operating-grant support for researchers without other CIHR funding, which will enable them to focus on their research and provides a base from which to secure ongoing support.

In 2000-01, the committee approved 24 new grants and awards, including three faculty salary awards, 14 operating grants, and seven equipment grants. Table 2 shows these new commitments, which total $3-million. Added to the first year's decisions, they bring total commitments for the five-year program to just over $4.5-million at year-end.

During 2000-01 Saskatchewan researchers continued to lose ground in the regular CIHR programs, obtaining only 0.5 per cent of operating grants and no faculty salary awards. This result is alarming and makes the regional partnership program even more crucial to the survival of health research in Saskatchewan. In January the University of Saskatchewan instituted an internal pre-review process for CIHR applications in an attempt to improve success rates. Everyone dedicated to reversing the CIHR funding decline in Saskatchewan will be closely watching CIHR's next competition results in June 2001 to determine the impact of this initiative.

When CIHR came into being in April 2000—with a budget larger than its predecessor, the Medical Research Council of Canada—many observers anticipated that more researchers would be supported. Rather than fund larger numbers of researchers, however, CIHR has used its increased resources to boost the size of awards, with the goal of reaching internationally competitive levels. As a result, funding cutoff levels remain extremely high and favour bigger research programs and researchers from richer provinces. We hope the CIHR's new strategic initiatives, to be announced in 2001-02, will help the federal agency more effectively fulfill its legislated mandate to support research across the country, and in doing so create a foundation for improved health-care in all provinces.

The Sask-CIHR RPP has played a major role in maintaining health research activity in the province. Without it, 27 researchers would have lost their national research funding support in the past two years and the province's health research community would literally be facing extinction.

University Co-ordinator of Health Research

Through a national search, Bruce Waygood was chosen this year as the first university co-ordinator of health research, a position supported by HSURC and the University of Saskatchewan. As part of a five-year agreement, the Commission provides $100,000 annually and the U of S, $50,000 toward office space and clerical support.

The co-ordinator position is part of the office of the Vice-President Research, U of S, but plays a provincial role that includes

- working with the University of Regina (U of R) to share information about health research funding opportunities and help foster collaboration on that campus and with other researchers in the province;
- informing researchers of health research funding opportunities;
- encouraging applications to CIHR and other national agencies;
- promoting collaborations among researchers from a broad range of health-related areas;
- lobbying the provincial and federal governments to ensure adequate support for health research in Saskatchewan; and,
- playing a lead role in developing Saskatchewan's response to CIHR initiatives.

As part of the funding agreement, an advisory committee comprising health research stakeholders in the province will work with the co-ordinator. This body is expected to be in place early in the coming year.

Dr. Waygood has worked diligently during his first nine months on the job and put in place many mechanisms and processes that should pay off in future success. He has initiated an internal pre-review process for all CIHR applications, established committees to determine strategies and priorities for CIHR applications, and explored various research and funding partnerships. The impact of these activities will no doubt be evident in the coming year or two.

SPHERU

The Saskatchewan Population Health and Evaluation Research Unit (SPHERU), is a strategic initiative of HSURC, Saskatchewan Health, the U of S, the U of R, and the Saskatchewan Association of Health Organizations (SAHO). The partners' vision was to create a centre of excellence that would build capacity in this vital and growing area of research and benefit the health of the Saskatchewan people. The concept of SPHERU was approved in 1996 and funding began in 1997-98.

Core financial support for SPHERU comes from Saskatchewan Health and HSURC, with additional funding to be secured via the regional partnership program

described above and other research grants and contracts. We manage the core funds and disburse them to the U of S and U of R for SPHERU faculty salaries and office support. The amount transferred this year was $537,000.

After considerable development work under the leadership of board chair Dr. Ralph Nilson, the Unit was incorporated in 1999 under *The Non-profit Corporations Act (1995)*. Operations moved into full swing in fall 1999, with the hiring of Dr. Ronald Labonte as SPHERU's first director.

During the current year SPHERU hired several new faculty members, bringing the faculty complement to four at the U of S and two at the U of R. Other priority activities included making applications for salary awards to CIHR, submitting proposals for research operating funds, establishing a seminar series, building relationships with policy-makers, and establishing connections with other research and community groups.

In their first full year together, faculty members collaborated closely to develop the unit's research framework, which is based on the following theme areas:

- economic and environmental globalism, governance, and health;
- community/environment as a health determinant;
- multiple roles, gender, and health;
- determinants of early childhood development; and,
- determinants of aboriginal health.

All SPHERU research is conducted collaboratively by its multi-disciplinary research faculty and includes as partners community groups, policy workers, and researchers from other universities. Research goals include producing new knowledge in the above areas and considering the policy and program implications of research findings.

In the coming year SPHERU will be working to add another faculty member at the U of R, explore additional funding sources, build its communications capacity (including a web site), undertake projects within its research framework, and continue to build relationships and networks within Saskatchewan and across Canada.

Health policy conference

"Caring for Health: Courageous Choices" is a health policy conference being organized jointly by Saskatchewan's universities and health research, policy, and governance organizations, including HSURC. The purpose of the November 2001 conference is to engage researchers, policy-makers, practitioners, and other interested individuals in examining the rapidly

moving forces influencing society and the health system. Issues to be addressed include technology and demand, economics and access, and demographics and sustainability.

Plenary sessions, reaction panels, roundtable discussions and workshops will engage participants in considering ethical choices, governance and accountability considerations, and policy and practice options. A lineup of well-respected international, national, and provincial speakers will guide the discussions.

Fund-raising for this event is underway and registration information will be available early in 2001-02. Organizers aim to reach a wide audience of academics, service providers, and policy-makers across Canada, and expect the conference will lead to new research and practice recommendations and partnerships that will benefit health care system management.

Directions for 2001-2002

New programs will top the priority list for HSURC's research funding work in 2001-02. Over the past year, HSURC has consulted its research funding advisory committee and considered various options for ensuring our support is structured to have the greatest impact on building health research capacity in Saskatchewan.

These deliberations point to key directions for HSURC:

- continuing to play a developmental role, by helping Saskatchewan researchers obtain national-level funding;
- continuing to support new faculty in establishing their health research programs;
- exploring ways to lever more national health research funding for Saskatchewan, especially through new strategic initiatives of the CIHR; and,
- targeting some support to research on priority health issues for Saskatchewan.

Our board is considering a slate of program adjustments aimed at moving in these directions. Before making any changes, we will once again consult our research funding advisory committee and others. Changes will be implemented and announced as quickly as possible.

We also plan to work closely with the provincial government to ensure adequate funding for health research in Saskatchewan. Provinces that offer strong funding support for their health researchers see many benefits, including top-quality health care, good system planning and management, ability to attract and retain researchers and specialists, strong education for health professionals, and economic spinoffs such as the creation of highly skilled jobs.

A year ago the Saskatchewan government established the Innovation and Science Fund, an initiative that holds the potential for levering more federal health research funding. Also, a more recent initiative calls for directing profits from the Saskatchewan Government Growth Fund to health research. HSURC has been invited to help define this proposed program's mechanisms and processes.

In the coming year, we will carry out a five-year follow-up study of research grant recipients. Through it, we will try to measure the longer-term impact of research funding on grant holders' careers and achievements, as well as on the teaching and research environment, on health care innovations, and on the economy. The survey will become an annual component of our monitoring activities.

In partnership with others, we will continue the activities described above and pursue new initiatives as needs and opportunities dictate, always striving to fulfill our mandate of supporting, stimulating, and promoting health research in Saskatchewan.

Table 1
Summary of Eligible Applications Received, Recommended, and Approved
Competition 21 (2000-01)

Grant Category	Received		Recommended		Approved	
	No.	$	No.	$	No.	$
Biomedical Establishment	13	$902,613	11	$762,613	7	$485,881
Establishment Equipment	6	134,155	5	104,205	5	104,205
SUBTOTAL	**19**	**$1,036,768**	**16**	**$866,818**	**12**	**$590,086**
Socio-Health Establishment	5	$275,745	2	$110,771	2	$110,771
Socio-Health Operating	8	460,441	1	39,206	1	39,206
Socio-Health Development	4	19,901	1	4,916	1	4,916
SUBTOTAL	**17**	**$756,087**	**4**	**$154,893**	**4**	**$154,893**
Postdoctoral Fellowships	26	$1,837,500	20	$1,396,500	10	$661,500
SUBTOTAL	**26**	**$1,837,500**	**20**	**$1,396,500**	**10**	**$661,500**
Conference Grants	1	$1,600	1	$1,600	1	$1,600
TOTAL	**63**	**$3,631,955**	**41**	**$2,419,811**	**27**	**$1,408,079**

Table 2
Summary of Research Funding Applications Approved,
Saskatchewan - Canadian Institutes of Health Research (CIHR)
Regional Partnership Program, 2000-01

Type	Length	Number Approved *		Approved Funding ($) **	
		All Previous	Current Year	All Previous	Current Year
Faculty Salary Awards	5 years	3	3	835,980	1,045,960
Operating Grants	2 years	7	14	736,336	1,917,902
Equipment Grants	1 year	2	7	10,378	78,664
TOTAL	--	12	24	1,582,694	3,042,526

*A list of approved grants and awards is available upon request.
** Approved amounts include both the CIHR and Saskatchewan contributions, matching 1:1.

Appendices

Appendix 1

Commissioners April 1/00 - March 31/01

Elizabeth Harrison (Chair)
Director, School of Physical Therapy
University of Saskatchewan
Saskatoon, SK

Gordon Asmundson
Director, Clinical Research and
Development
Regina Health District
Regina, SK
(effective June 20, 2000)

Dan de Vlieger
Professor, Dept. of Political Science
University of Regina
Regina, SK

Irene Denis
Chief Executive Officer
Northwest Health District
Meadow Lake, SK
(effective Sept. 6, 2000)

Marianne Hodgson
Managing Consultant
Hodgson Consulting
Regina, SK

James Irvine
Medical Health Officer
Northern Health Districts
La Ronge, SK

Gordon Johnson
Professor Emeritus
Dept. of Pharmacology
University of Saskatchewan
Saskatoon, SK
(effective June 20, 2000)

Barry Maber (Vice-chair)
Physician Vice-President
Saskatoon District Health
Saskatoon, SK

Robert McCulloch
Associate Vice-President, Academic
University of Regina
Regina, SK

Jean Morrison
Chief Executive Officer
Parkland Health District
Spiritwood, SK

Paul Peloso
Physician
Rheumatology/Immunology
Royal University Hospital
Saskatoon, SK
(until Dec. 31, 2000)

Jeff Taylor
Associate Professor
College of Pharmacy and Nutrition
University of Saskatchewan
Saskatoon, SK
(effective June 20, 2000)

Appendix 2

Study Working Groups

Preventive Home Care

Cecile Hunt (Chair)
Director of Health Services
North Central Health District
Melfort, SK

Suellen Beatty
CEO and Director of Resident Care
Sherbrooke Community Centre
Saskatoon, SK

Rene Blom
Manager
Prince Albert Housing Authority
Prince Albert, SK

Betsy Bury
Consumer
Saskatoon, SK

Ethel Harmel
Director of Health Services (retired)
Twin Rivers Health District
Maidstone, SK

Bert Linklater
Director, Regina and East Districts
District Management Services
Saskatchewan Health
Regina, SK

Stewart McMillan
Family Physician
Regina, SK

Sheila Mulatz
Program Coordinator
Southwest Health District
Maple Creek, SK

Susan Neville
Director, Long Term Care
Regina Health District
Regina, SK

Chantile Shannon
Manager of Program and Tenant
Services Development
Municipal Housing, Government of
Saskatchewan
Regina, SK

Melanie Woods
Care Coordinator
Parkland Care Centre
Melfort, SK

System Performance Indicators

Marianne Hodgson (Chair)
Managing Consultant
Hodgson Consulting
Regina, SK
HSURC Board Member

James Irvine
Medical Health Officer
Northern Health Districts
La Ronge, SK
HSURC Board Member

Jean Morrison
Chief Executive Officer
Parkland Health District
Spiritwood, SK
HSURC Board Member

Mental Health

James Irvine (Chair)
Medical Health Officer
Northern Health Districts
LaRonge, SK
HSURC Board Member

Roger Bitschy
Community Mental Health Nurse
Parkland Health District
Spiritwood, SK

Eric Braun
Canadian Mental Health Association
- Saskatchewan Chapter
Saskatoon, SK

Leslie Christianson
Coordinated Behaviour
Management
North Central Health District
Melfort, SK

Greg Drummond
Director of Mental Health Services
Regina Health District
Regina, SK

Dave Galloway
Director of Planning, Development,
and Evaluation
South East Health District
Estevan, SK

Moira Gautron
Director of Mental Health Services
Battlefords Health District
North Battleford, SK

Nikki Gerrard
Community Psychologist
Saskatoon, SK

Roxanne Inch
Researcher
Saskatoon, SK

Doug Jurgens
Psychologist
Prince Albert , SK

David Keegan
Psychiatrist
Saskatoon, SK

Roumen Mileve
Psychiatrist
Regina, SK

Beth Vachon
Community Services Director
Swift Current Health District
Swift Current, SK

Emergency Services

Jean Morrison (Chair)
Chief Executive Officer
Parkland Health District
Spiritwood, SK
HSURC Board Member

Barb Biliske
Director of Community Services
Mamawetan-Churchill River
Health District
La Ronge, SK

Jim Cross
Medical Director
Emergency Medical Services
Prince Albert Health District
Prince Albert, SK

Coral Dale
RM Administrator
RM of Snipe Lake #259
Eston, SK

Dale Dewar
Coordinator, Rural Family Medicine
Program and
Family Physician
Wynyard, SK

Murray Goeres
Director of Facilities
Moose Mountain Health District
Wawota, SK

Ian Larocque
General Manager
Humboldt Ambulance
Humboldt, SK

Kay McCuaig
Program Coordinator-Southline area
Southwest Health District
Eastend, SK

Cliff Orriss
Human Resources Manager
Northwest Health District
Meadow Lake, SK

Glen Perchie
Director
Emergency Medical Services
Regina Health District
Regina, SK

Randolph ven der Buhs
First Response Coordinator
St. Brieux, SK

Adrienne Wendt
First Responder Coordinator
Midwest Health District
Rosetown, SK

Hip Fracture

Robert McCulloch (Chair)
Associate VP - Academic
University of Regina
Regina, SK
HSURC Board Member

Cathy Arnold
Professor, School of Physical Therapy
University of Saskatchewan
Saskatoon, SK

Isabel Colvin
Saskatchewan Seniors Mechanism
Regina, SK

Earl DeCouteau
Gerontologist
Saskatoon, SK

Sharon DeSantis
Director of Health Services
Northeast Health District
Nipawin, SK

Curtis Loucks
Pharmacist
Yorkton, SK

Dawn McNeil
Director of Home Care
Regina Health District
Regina, SK

Wojciech Olszynski
Rheumatologist
Saskatoon, SK

Paul Peloso
Rheumatologist
Saskatoon, SK
(until December 2000)

Jack Reilly
Orthopedic Surgeon
Saskatoon, SK

Peggy Tysdal
Family Physician
Moose Jaw, SK

Ashok Verma
Radiologist
Regina, SK
(effective January 2001)

Susan Whiting
Assistant Dean, College of Pharmacy and Nutrition
University of Saskatchewan
Saskatoon, SK

Preventive Home Care Follow-up

Irene Denis (Chair)
Chief Executive Officer
Northwest Health District
Meadow Lake, SK
HSURC Board Member

Betsy Bury
Consumer
Saskatoon, SK

Sherril Carlson
Territory Manager of North
Battlefords Territory Operations
Saskatchewan Housing Corporation
North Battleford, SK

Bev Dougan
Community Care Manager
Parkland Health District
Spiritwood, SK

Val Hunko
Home Care Manager - East Team
Regina Health District
Regina, SK

Jane McMurtry
Director of Community Based
Services
South East Health District
Estevan, SK

Chantile Shannon
Manager, Program and Tenant
Services Development
Saskatchewan Housing Corporation
Regina, SK

Rae Sveinbjornson
Home Care Manager
Midwest Health District
Outlook, SK

Lynne Zadorozny
Director of Community Health
Moose Jaw-Thunder Creek Health
District
Moose Jaw, SK

Appendix 3

Grants and Awards Review Committees

Biomedical Review Committee

Liz Harrison (Chair) (4)
School of Physical Therapy
College of Medicine
University of Saskatchewan
Saskatoon, SK

Andy Allen (1)
Veterinary Pathology
Western College of Veterinary Medicine
Saskatoon, SK

Andrew Gloster (1)
Anatomy and Cell Biology
College of Medicine
University of Saskatchewan
Saskatoon, SK

Bob Haennel (2)
Faculty of Physical Activity Studies
University of Regina
Regina, SK

Vern Hoeppner (3)
Medicine
College of Medicine
University of Saskatchewan
Saskatoon, SK

Suzanne Laferte (2)
Biochemistry
College of Medicine
University of Saskatchewan
Saskatoon, SK

Henry Tabel (1)
Veterinary Microbiology
Western College of Veterinary Medicine
Saskatoon, SK

Susan Whiting (3)
Nutrition and Dietetics
College of Pharmacy and Nutrition
University of Saskatchewan
Saskatoon, SK

Jerry Yager (2)
Pediatrics
College of Medicine
University of Saskatchewan
Saskatoon, SK

Figures in parentheses indicate number of years served, including current competition.

Socio-Health Review Committee

Paul Peloso (Chair) (4)
Rheumatology/Immunology
Medicine
College of Medicine
University of Saskatchewan
Saskatoon, SK

Gordon Asmundson (3)
Clinical Research and Development
Regina Health District
Regina, SK

Kathryn Green (1)
Community Health and Epidemiology
College of Medicine
University of Saskatchewan
Saskatoon, SK

Pamela Hawranik (1)
Faculty of Nursing
University of Manitoba
Winnipeg, MB

Bob Hilsden (2)
Community Health Sciences
Faculty of Medicine
University of Calgary
Calgary, AB

Scott Livingstone (3)
Specialized Services
Saskatchewan Health
Regina, SK

Cory Neudorf (3)
Strategic Health Information and
Planning Services
Saskatoon District Health
Saskatoon, SK

Lorrie Sippola (1)
Psychology
College of Arts and Science
University of Saskatchewan
Saskatoon, SK

Figures in parentheses indicate number of years served, including current competition.

Personnel Awards Review Committee

Dan de Vlieger (Chair) (5)
Political Science
Faculty of Arts
University of Regina
Regina, SK

Neil Ashton (1)
Biology
Faculty of Science
University of Regina
Regina, SK

Patricia Blakley (2)
Pediatrics
College of Medicine
University of Saskatchewan
Saskatoon, SK

Karen Chad (3)
College of Kinesiology
University of Saskatchewan
Saskatoon, SK

Donald Hamilton (2)
Veterinary Physiological Sciences
Western College of Veterinary Medicine
University of Saskatchewan
Saskatoon, SK

Murray Knuttila (1)
Faculty of Arts
University of Regina
Regina, SK

Vikram Misra (3)
Veterinary Microbiology
Western College of Veterinary Medicine
University of Saskatchewan
Saskatoon, SK

Anurag Saxena (1)
Pathology
College of Medicine
University of Saskatchewan
Saskatoon, SK

David Schreyer (3)
Anatomy and Cell Biology
College of Medicine
University of Saskatchewan
Saskatoon, SK

Bruce Waygood (2)
Biochemistry
College of Medicine
University of Saskatchewan
Saskatoon, SK

Gordon Zello (1)
College of Pharmacy and Nutrition
University of Saskatchewan
Saskatoon, SK

Figures in parentheses indicate number of years served, including current competition.

Research Funding Advisory Committee

Liz Harrison (Chair)
School of Physical Therapy
College of Medicine
University of Saskatchewan
Saskatoon, SK

Keith Denford
Biology
Faculty of Science
University of Regina
Regina, SK

Dan de Vlieger
Political Science
Faculty of Arts
University of Regina
Regina, SK

Thomas Hadjistavropoulos
Psychology
Faculty of Arts
University of Regina
Regina, SK

Barry McLennan
Office of the Dean
College of Medicine
University of Saskatchewan
Saskatoon, SK

Cory Neudorf
Strategic Health Information and Planning Services
Saskatoon District Health
Saskatoon, SK

Paul Peloso
Rheumatology/Immunology
Medicine
College of Medicine
University of Saskatchewan
Saskatoon, SK

Valerie Verge
Anatomy and Cell Biology
College of Medicine
University of Saskatchewan
Saskatoon, SK

Bruce Waygood
Biochemistry
College of Medicine
University of Saskatchewan
Saskatoon, SK

Susan Whiting
Nutrition and Dietetics
College of Pharmacy and Nutrition
University of Saskatchewan
Saskatoon, SK

Appendix 4

Awards Granted
Competition 21 (2000 - 2001)

Research Fellowships

Fellow (Supervisor), Department, Faculty, Institution, *Project or field of research*

New two-year postdoctoral fellowships:

Ou Bai (Xin-Min Li)
Psychiatry, Medicine, University of Saskatchewan
P75NTR induced apoptosis: Involvement in the pathophysiology of schizophrenia

Pawel Bartlewski (P. Jorge Chedrese)
Obstetrics, Gynecology and Reproductive Sciences, Medicine, University of Saskatchewan
Ovine model for the study of ovarian and endocrine function in women

Todd Hryciw (David J. Schreyer)
Anatomy and Cell Biology, Medicine, University of Saskatchewan
Transcriptional repression of GAP-43

Dahai Hu (Rui Wang)
Physiology, Medicine, University of Saskatchewan
The expression and function of K channels in hypertension

Yitao Long (Jeremy Lee, Heinz-Bernhard Kraatz)
Biochemistry, Medicine, University of Saskatchewan
Photoactivated biosensing

Angelo Mena (Dale Godson, Lorne Babiuk)
VIDO, University of Saskatchewan
Mechanisms of CpG induced immunomodulation

Michael McCubbin (Ronald Labonte)
SPHERU, Physical Activity Studies, University of Regina
Power, powerlessness and empowerment as determinants of population health

Meiqing Shi (Henry Tabel)
Veterinary Microbiology, Veterinary Medicine, University of Saskatchewan
Immunosuppression in experimental African trypanosomiasis: What is the nature of interaction between the suppressor lymphocytes and suppressor macrophases?

Renewals for a third year:

Huse Kamencic (Bernhard Juurlink)
Anatomy and Cell Biology, Medicine, University of Saskatchewan
Effect of antioxidants on axonal regrowth following spinal cord injury

Radhey Kaushik (Philip Griebel)
VIDO, University of Saskatchewan
Delivery of oral vaccines

Biomedical Establishment Grants

Tanya Dahms	35,000	00-01
Chemistry, Science, University of Regina	35,000	01-02
Towards an understanding of the opioid receptor system		
Jim Fang	34,942	00-01
Pharmacy and Nutrition, University of Saskatchewan	34,607	01-02
Management of metabolic drug-drug interactions by strategic dosage scheduling		
Laurentiu Givelichian	33,524	00-01
Pediatrics, Medicine, University of Saskatchewan	33,640	01-02
Moderate systemic hypothermia in the treatment of neonatal hypoxic ischemic encephalopathy		
Heinz-Bernhard Kraatz	35,000	00-01
Chemistry, Arts and Science, University of Saskatchewan	35,000	01-02
Protein-specific biosensors		
David Palmer	35,000	00-01
Chemistry, Arts and Science, University of Saskatchewan	35,000	01-02
Homoaconitase as a target for anti-fungal therapy		
Elemir Simko	34,988	00-01
Veterinary Pathology, WCVM, University of Saskatchewan	34,974	01-02
Intestinal humoral innate defenses in neonates		

Hui Di Wang 34,206 00-01
Pharmacology, Medicine, University of Saskatchewan 35,000 01-02
Adventitial NADH(P) oxidase-derived superoxide anion in angiotensin II-induced hypertension

Biomedical Equipment Grants

Tanya Dahms 28,851 00-01
Chemistry, Science, University of Regina
SGI octane/se R12000 workstation; crystal eyes glasses

Jim Fang 24,865 00-01
Pharmacy and Nutrition, University of Saskatchewan
HPLC pump, HPLC system controller, HPLC autosamplin injector and accessories

Laurentiu Givelichian 10,916 00-01
Pediatrics, Medicine, University of Saskatchewan
Hyper-Hypothermia Blanketrol II

Elemir Simko 30,000 00-01
Veterinary Pathology, WCVM, University of Saskatchewan
Chromatography equipment

Hui Di Wang 9,573 00-01
Pharmacology, Medicine, University of Saskatchewan
Luminometry system from turner designs. Visitech BP-2000 blood pressure analysis system.

Socio-Health Operating Grants

Dennis Alfano 22,302 00-01
Psychology, Arts, University of Regina 16,904 01-02
Prospective study of concussion injury in athletes, phase 2

Socio-Health Establishment Grants

Kim Dorsch	33,340	00-01
Physical Activity Studies, University of Regina	27,890	01-02
The impact of personal and social environmental factors on short- and long-term physically active behaviors in a cardiac rehabilitation population		
Dorothy Forbes	27,653	00-01
Nursing, University of Saskatchewan	21,888	01-02
A longitudinal study of the use of home care services in Canada		

Socio-Health Development Grants

Donna Goodwin	4,916	00-01
Physical Activity Studies, University of Regina		
The experience of the imperfect body: the metaphorical intersection of sickness, disability, and physical wellness		

Conference Grants

Jon Tonita	1,600	00-01
Saskatchewan Cancer Agency		
Building for the future: Foundations for collaborative health research in Saskatchewan		

Appendix 5
Report of Management

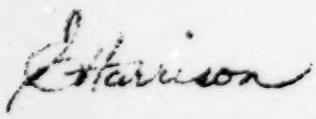
Management is responsible for the integrity of the financial information reported by the Health Services Utilization and Research Commission. Fulfilling this responsibility requires the preparation and presentation of financial statements and other financial information in accordance with generally accepted accounting principles which are consistently applied, with any exceptions specifically described in the financial statements.

The accounting system used by the Commission includes an appropriate system of internal controls to provide reasonable assurance that:

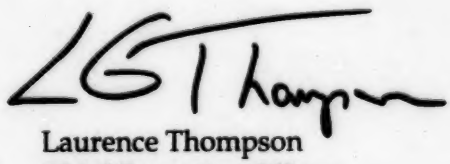
- transactions are authorized;
- the assets of the Commission are protected from loss and unauthorized use; and
- the accounts are properly kept and financial reports are properly monitored to ensure reliable information is provided for preparation of financial statements and other financial information.

To ensure management meets its responsibilities for financial reporting and internal control, the members of the Commission discuss audit and financial reporting matters with representatives of management at regular meetings. The Commission members have also reviewed and approved the financial statements with representatives of management.

The Provincial Auditor of Saskatchewan has audited the Commission's balance sheet and statements of revenue, expenditure and changes in fund balance and the statement of cash flows. His responsibility is to express an opinion on the fairness of management's financial statements. The Auditor's report outlines the scope of his audit and his opinion.



E. L. Harrison, PhD, MSc, BPT
Chair



Laurence Thompson
Chief Executive Officer

Saskatoon, Saskatchewan
July 11, 2001

Appendix 6
Financial Statements and Auditor's Report

Health Services Utilization
and Research Commission
For the year ended March 31, 2001

AUDITOR'S REPORT

To the Members of the Legislative Assembly of Saskatchewan

I have audited the balance sheet of the Health Services Utilization and Research Commission as at March 31, 2001 and the statements of revenue, expenses and changes in fund balance and cash flows for the year then ended. The Commission's management is responsible for preparing these financial statements for Treasury Board's approval. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Health Services Utilization and Research Commission as at March 31, 2001 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Fred Wendel, CMA, CA
Acting Provincial Auditor

Regina, Saskatchewan
July 11, 2001

HEALTH SERVICES UTILIZATION AND RESEARCH COMMISSION
BALANCE SHEET
As at March 31

	2001					2000
	Operating Fund	Regionalization Research Centre (Note 9)	SPHERU (Note 10)	Regional Partnership Program (Note 11)	Total	Total
ASSETS						
Current assets:						
Cash	$ 219,568	$ 150	$ ---	$ ---	$ 219,718	$ 115,169
Accrued Interest receivable	4,641	---	---	---	4,641	14,349
Accounts receivable	16,786	1,488	---	---	18,274	56,219
Short-term investments (Note 2(e) and 3)	690,688	90,465	450,000	250,000	1,481,153	2,896,688
Prepaid expenses	1,038	---	---	---	1,038	3,620
	932,721	92,103	450,000	250,000	1,724,824	3,086,045
Long-term investments (Note 2(e) and 3)	4,047,811	---	826,859	300,186	5,174,856	4,112,070
Capital assets (Note 2(c) and 5)	70,570	9,757	---	---	80,327	101,509
Total assets	$5,051,102	$ 101,860	$ 1,276,859	$ 550,186	$ 6,980,007	$ 7,299,624
LIABILITIES & FUND BALANCE						
Liabilities:						
Accounts payable	$ 13,589	$ 4,829	$ ---	$ ---	$ 18,418	$ 44,366
Payroll liabilities	561	---	---	---	561	---
Grants payable	412,442	---	---	---	412,442	725,201
Total liabilities	426,592	4,829	---	---	431,421	769,567
Fund balances:						
Externally restricted	---	97,031	276,859	350,186	724,076	1,088,937
Internally restricted	4,322	---	1,000,000	200,000	1,204,322	863,050
Unrestricted	4,620,188	---	---	---	4,620,188	4,578,070
Fund balances (Statement 2)	4,624,510	97,031	1,276,859	550,186	6,548,586	6,530,057
Commitments (Note 12)						
Total liabilities & fund balance	$5,051,102	$ 101,860	$ 1,276,859	$ 550,186	$ 6,980,007	$ 7,299,624

(See accompanying notes to the financial statements)

Statement 2

HEALTH SERVICES UTILIZATION AND RESEARCH COMMISSION
STATEMENT OF REVENUE, EXPENSES AND CHANGES IN FUND BALANCE
Year Ended March 31

	2001						2000
	Operating Fund		Regionalization Research Centre	SPHERU	Regional Partnership Program	Total	Total
	Budget (Note 8)	Actual	(Note 9)	(Note 10)	(Note 11)		
Revenue:							
Saskatchewan Health General Revenue Fund	$ 2,308,000	$ 2,308,000	$ —	$ 250,000	$ 400,000	$ 2,958,000	$ 2,958,000
SK Economic Co-operative Development	—	—	—	—	250,000	250,000	250,000
Federal Government							
Canadian Institute of Health Research	39,140	39,140	—	—	—	39,140	65,192
Health Transition Fund	—	7,953	—	—	—	7,953	43,460
HealNet Research Project	—	—	239,852	—	—	239,852	122,037
CHSRF(Note 9(b))	—	—	15,750	—	—	15,750	18,000
Recoveries	120,000	15,751	—	—	—	15,751	14,114
Interest	325,000	393,479	—	25,000	—	418,479	384,550
Gain on disposal of capital assets	—	25	—	—	—	25	—
Miscellaneous	—	645	1,000	—	—	1,645	16,608
Total revenue	2,792,140	2,764,993	256,602	275,000	650,000	3,946,595	3,871,961
Expenses:							
Student grants	—	—	29,300	—	—	29,300	8,925
Research grants	1,550,000	1,328,828	—	537,000	773,832	2,639,660	1,576,547
Wages and benefits	850,877	801,578	150,188	—	—	951,766	903,662
Administrative and operating expenses	282,687	171,586	46,510	—	—	218,096	246,861
Honoraria and expenses of the board and committees	51,168	25,328	—	—	—	25,328	30,478
Amortization expense	—	27,808	6,521	—	—	34,329	35,393
Rent	28,328	26,475	3,112	—	—	29,587	31,180
Loss on disposal of capital assets	—	—	—	—	—	—	3,621
Total expenses	2,763,060	2,381,603	235,631	537,000	773,832	3,928,066	2,836,667
Excess (deficiency) of revenue over expenses	$ 29,080	383,390	20,971	(262,000)	(123,832)	18,529	1,035,294
Fund balance, beginning of year		4,591,120	76,060	1,288,859	574,018	6,530,057	5,494,763
Transfer between funds (Note 10 and 11)		(350,000)	—	250,000	100,000	—	—
Fund balance, end of year (Statement 1)		$ 4,624,510	$ 97,031	$ 1,276,859	$ 550,186	$ 6,548,586	$ 6,530,057

(See accompanying notes to the financial statements)

HEALTH SERVICES UTILIZATION AND RESEARCH COMMISSION
STATEMENT OF CASH FLOWS
For the Year Ended March 31

	Operating Fund	Regionalization Research Centre (Note 9)	SPHERU (Note 10)	Regional Partnership Program (Note 11)	Total 2001	Total 2000
Cash provided by (used in):						
Operating activities:						
Excess (deficiency) of revenue over expenses (Statement 2)	$ 383,390	$ 20,971	$ (262,000)	$ (123,832)	$ 18,529	$1,035,294
Non-cash items:						
Amortization expense	27,808	6,521	---	---	34,329	35,393
(Gain) loss on disposal of capital assets	(25)	---	---	---	(25)	3,621
Net Changes in non-cash working capital (Note 4)	(298,199)	10,288	---	---	(287,911)	368,823
	112,974	37,780	(262,000)	(123,832)	(235,078)	1,443,131
Investment activities:						
Decrease (increase) in short-term investments	285,213	(32,555)	838,859	324,018	1,415,535	(662,218)
Decrease (increase) in long-term investments	64,259	---	(826,859)	(300,186)	(1,062,786)	(880,279)
Purchases of capital assets	(7,922)	(5,225)	---	---	(13,147)	(27,707)
Proceeds from disposal of capital assets	25	---	---	---	25	---
	341,575	(37,780)	12,000	23,832	339,627	(1,570,204)
Net increase (decrease) in cash	454,549	---	(250,000)	(100,000)	104,549	(127,073)
Cash, beginning of year	115,019	150	---	---	115,169	242,242
Transfers between funds (Note 10 and 11)	(350,000)	---	250,000	100,000	---	---
Cash, end of year	$ 219,568	$ 150	$ ---	$ ---	$ 219,718	$ 115,169

(See accompanying notes to the financial statements)

HEALTH SERVICES UTILIZATION AND RESEARCH COMMISSION
NOTES TO THE FINANCIAL STATEMENTS
March 31, 2001

1. Establishment of the Commission

Order in Council 165/92 established the Health Services Utilization and Research Commission (HSURC) as a Crown corporation on February 20, 1992. The Commission has been continued pursuant to *The Health Services Utilization and Research Commission Act*. The Commission reviews, analyzes and makes recommendations as to the most effective utilization of health services in Saskatchewan and provides research funding.

2. Accounting Policies

The Health Services Utilization and Research Commission maintains its accounts using Canadian generally accepted accounting principles including the following significant accounting policies:

a) Fund Accounting

The accounts of the Commission are maintained in accordance with the principles of restricted fund accounting for contributions. For financial reporting purposes, accounts with similar characteristics have been combined into the following funds:

i) Operating Fund

The operating fund reflects the primary operations of the Board including Saskatchewan Health - General Revenue Fund revenues received to provide research funding to various researchers and to conduct in-house utilization research. Other revenue consists of Federal Government grants not restricted to HealNet Research Project, recoveries, interest and miscellaneous revenue. Expenses consist of the research grants awarded, cost of in-house utilization research and administrative costs.

ii) Restricted Fund – Regionalization Research Centre

The Regionalization Research Centre Fund reflects revenue received from the Networks of Centres of Excellence Program (Federal Government) and the Canadian Health Services Research Foundation (CHSRF). Expenses consist of costs of in-house and contract research staff and administrative costs. This fund was previously referred to as the HEALNet Research Project Fund.

iii) Restricted Fund – Saskatchewan Population Health and Evaluation Research Unit (SPHERU).

The SPHERU Fund reflects transfers from the Health Services Utilization and Research Commission, and revenue from Saskatchewan Health – General Revenue Fund for the Unit. Expenses consist of research grants.

iv) Restricted Fund – Saskatchewan – Canadian Institute of Health Research Regional Partnership Program (RPP).

The RPP Fund reflects transfers from the Health Services Utilization and Research Commission, and revenue from Saskatchewan Health – General Revenue Fund & Saskatchewan Economic Co-operative Development. Expenses consist of research grants.

b) Research Grants

Annual Competitions

The Health Services Utilization and Research Commission holds annual competitions through which funds are awarded to successful applicants for terms of up to two years. The Commission expenses the approved funds for each year of the grant, provided recipients meet eligibility criteria. Awarded amounts not paid or payable at year-end are recorded as commitments in the notes to the financial statements.

The balance of funds advanced to administering institutions in excess of the current requirements of researchers is held in trust by those institutions until drawn down by the researchers. Funds not spent during the life of a successfully completed research grant are treated as a recovery in the year that this is determined. These funds are then available to be awarded for future research.

c) Capital Assets

Capital assets are recorded at cost. Normal maintenance and repairs are expensed as incurred. Capital assets are amortized on a straight-line basis over their estimated useful lives (3 to 10 years).

d) Revenue

Unrestricted contributions are recognized as revenue in the Operating Fund in the year received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured. Restricted contributions related to general operations are recognized as revenue of the Operating Fund in the year in which the related expenses are incurred. All other restricted contributions are recognized as revenue of the appropriate restricted fund.

e) Investments

Investments are valued at the lower of amortized cost or net realizable value.

3. Investments

	2001		2000	
	Carrying Value	Effective Rate	Carrying Value	Effective Rate
Short-term investments	$ 1,481,153		$ 2,896,688	
Long-term investments:				
Province of Saskatchewan Strip Bond, matures in 19 months	288,810	6.0 %	273,404	6.0%
Government of Canada Strip Bonds, mature in 1-3 years	672,611	5.7 - 5.8%	514,115	5.3%
Farm Credit Corporation Bond, matures in 2 years	318,113	5.9%	513,391	5.5%
CIBC Strip Bond, matures in 2 years	639,605	6.3%	603,483	6.3%
Province of Quebec Bond, matures in 2 years	416,840	6.0%	—	—
Province of British Columbia Strip Bonds, mature in 3-4 years	1,355,809	6.1 - 6.5%	1,275,844	6.1% - 6.5%
Province of Ontario Bonds, mature in 3-5 years	1,138,325	6.0 - 6.6%	603,633	6.6%
Ontario Hydro Bond, matures in 4 years	244,743	6.0%	—	—
Province of Saskatchewan Savings Bond, matures in 4 years	100,000	5.8%	328,200	5.0%
	5,174,856		4,112,070	
	$ 6,656,009		$ 7,008,758	

4. Changes in Components of Non-Cash Working Capital

	Operating Fund	Regionalization Research Centre	Total 2001	Total 2000
Decrease (increase) in accrued interest receivable	$ 9,708	$ —	$ 9,708	$ (3,568)
Decrease in accounts receivable	26,778	11,167	37,945	52,209
Decrease in prepaid expenses	2,582	—	2,582	14,966
(Decrease) increase in accounts payable	(25,069)	(879)	(25,948)	14,461
Increase (decrease) in payroll liabilities	561	—	561	(11,242)
(Decrease) increase in grants payable	(312,759)	—	(312,759)	308,663
Decrease in deferred revenue	—	—	—	(6,666)

Net changes in non-cash working capital	$ (298,199)	$ 10,288	$(287,911)	$ 368,823

5. Capital Assets

	2001			2000
	Cost	Accumulated Amortization	Net Book Value	Net Book Value
Furniture & Equipment	$ 252,926	$ 172,599	$ 80,327	$ 101,509

6. Related Party Transactions

Included in these financial statements are transactions with various Saskatchewan Crown Corporations, departments, agencies, boards and commissions related to the Commission by virtue of common control by the Government of Saskatchewan, and non-Crown corporations and enterprises subject to joint control and significant influence by the Government of Saskatchewan (collectively referred to as "related parties").

Routine operating transactions with related parties are recorded at the standard rates charged by those organizations and are settled on normal trade terms. These transactions, and amounts outstanding at year-end are as follows:

	2001	2000
Research grant, administrative and occupancy expenses:		
Regina District Health Board	$ 50,594	$ 31,047
University of Regina	350,764	107,631
University of Saskatchewan	2,275,467	1,466,243
Saskatoon District Health Board	48,978	65,922
Moose Jaw-Thunder Creek Health District	—	—
Saskatchewan Health	8,601	115
Prince Albert Health District	—	1,700
Capital Pension Plan - employee benefits	40,193	37,876
Accounts payable	13,264	31,864
Grants payable	412,442	725,201

The Commission pays Provincial Sales Tax to the Saskatchewan Department of Finance on all its taxable purchases. Taxes paid are recorded as part of the cost of those purchases.

Other transactions with related parties and amounts due to or from them are described separately in these financial statements and the notes thereto.

7. Financial Instruments

The Commission has the following financial instruments: accrued interest receivable, accounts receivable, investments, accounts payable, and grants payable. The following paragraphs disclose the significant aspects of these financial instruments.

a) Significant terms and conditions

There are no significant terms and conditions associated with the financial instruments, other than investments, that may affect the amount, timing, and certainty of future cash flows. Significant terms and conditions for investments are described separately in these financial statements and the notes thereto.

b) Interest rate risk

The Commission is exposed to interest rate risk when the value of its financial instruments fluctuate due to changes in market interest rates.

The Commission's receivables and payables are non-interest bearing. Due to the short-term nature of these, as well as cash and short-term investments, interest rate risk is minimal.

As market interest rates fluctuate the market value of long-term investments moves in the opposite direction. This risk will affect the price the Commission could sell the investments for prior to maturity.

c) Credit risk

The Commission is exposed to credit risk from potential non-payment of accounts receivable or investment income and principal.

Most of the Commission's receivables are from provincial and federal governments, therefore the credit risk is minimal.

The Commission's investments consist of provincial and federal government bonds, promissory notes, treasury bills and bankers acceptances with large Canadian banks. Therefore, credit risk for investments and related accrued interest receivable is minimal.

d) Fair Value

For the following financial instruments, the carrying amounts approximate fair value due to their immediate or short-term nature:

Accrued interest receivable
Accounts receivable
Short-term investments
Accounts payable

Payroll liabilities
Grants payable

The fair value of long-term investments is $ 5,174,856 (2000 - $4,112,070). The fair value is considered to approximate quoted market values.

8. Budget

These amounts represent the operating budget approved by the Board on June 13, 2000.

9. Regionalization Research Centre

a) Networks of Centres of Excellence Program (NCE) - HEALNet Research Project

Current agreement: July 1, 1999 to June 30, 2002

The Commission received an allocation of $261,795 for use in the 2000/2001 year. In addition, the Commission was allowed to retain a portion of the unused funding from previous years and returned $21,943 to the NCE, resulting in revenue of $239,852.

The Commission spent $229,096 during the 2000/2001 year.

b) Canadian Health Services Research Foundation (CHSRF)

In 1999/2000, the Commission received for the Regionalization Research Centre, a grant from the Canadian Health Services Research Foundation. The two-year grant is $20,000, for the period November 1, 1999 to October 31, 2001. In 2000/2001, $6,535 was spent. To date, $18,000 has been received and $10,920 spent.

In 2000/2001, the Commission received for the Regionalization Research Centre, an additional grant from the Canadian Health Services Research Foundation. The grant is $15,750 and is for the Centre's involvement in a study administered through McMaster University. No funds were spent in 2000/2001.

10. Saskatchewan Population Health Evaluation and Research Unit (SPHERU)

On July 9, 1999, the Saskatchewan Population Health and Evaluation Research Unit, Inc. (SPHERU) was incorporated as a separate entity under *The Non-Profit Corporations Act, 1995*. This corporation focuses on enhancing health and social planning, evaluating health system changes, improving health information use for planning and evaluation and health policy development.

The corporation is funded by Saskatchewan Health and HSURC which provided

$250,000 each during the year. HSURC administers the funds for the corporation and distributed $537,000 to SPHERU, Inc. during the year. Unused funding is retained for use in the 2001/2002 year.

11. Saskatchewan – Canadian Institute of Health Research Regional Partnership Program

The program was set up in 1999/2000 to provide funding support for Saskatchewan researchers and research projects. During the year, the program received funding from Saskatchewan Health, Saskatchewan Economic and Co-operative Development and HSURC, which provided $400,000, $250,000 and $100,000 respectively. HSURC agreed to manage the funds for the program, in a signed agreement with Saskatchewan Economic and Co-operative Development.

12. Commitments

At March 31, 2001, the Commission had the following commitments:

a) Research Grants

The Board has approved research grants for payment in 2001/2002 of $921,952, in 2002/2003 of $314,438, and in 2003/2004 of $24,500.

b) SPHERU

Under a memorandum of understanding, signed October 31, 1999, HSURC will pay SPHERU $250,000 per year and interest up to $25,000 per year until the year 2006/2007.

c) RPP

As per a May 1999 agreement between Saskatchewan Health, Saskatchewan Economic and Co-operative Development and CHSRF (formerly the Medical Research Council of Canada), HSURC will contribute $100,000 per year until the year 2003/2004.

13. Pension Plan

HSURC is a participating employer in the Capital Pension Plan, a defined contribution pension plan. Eligible employees make monthly contributions of 5.5% of gross salary, which are matched by HSURC. During the year, the Commission's total contributions were $40,193 (2000 - $37,876).